



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

APR 15 1987

OFFICE OF  
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM:

SUBJECT: ID # NM-870001 Acephate(ORTHENE®-75S): 24(c)  
[RCB: 2040] on cottonseed in New Mexico.  
[Acc.: None]

FROM: William L. Anthony  
Residue Chemistry Branch  
Hazard Evaluation Division (TS-769)

THRU: Ed Zager, Section Head  
Special Registration Section II  
Residue Chemistry Branch  
Hazard Evaluation Division (TS-769)

TO: Williams Miller, PM #16  
Insecticide-Rodenticide Branch  
Registration Division (TS-767)

*William L. Anthony*  
*EZ*

The Chevron Chemical Co., Richmond, CA requests a Special Local Needs(SLN) 24(c) registration for the use of the insecticide ORTHENE®-75S soluble powder(acephate)(EPA Reg. #239-2418-AA) for hopper box seed treatment on cottonseed. This product is to be used to control Thrips, cotton aphids, and the black(greasy) cutworm and is for distribution and use only in the State of New Mexico.

A permanent tolerance has been established for residues of acephate (O,S-Dimethylacetyl-phosphoramidothioate) and its cholinesterase-inhibiting metabolite, methamidophos, (O,S-dimethyl-phosphoramidothioate) in/on cottonseed at 2.0 ppm(40 CFR §180.108).

ORTHENE®-80 Seed Protectant(EPA Reg.#239-2434-AA) is registered for use on cottonseed. The seed is treated with 8 oz.(6.4 oz a.i.)/100 lbs seed with following restrictions:

1. Treated seed must not be used for or mixed with food or animal feed, or processed for oil.
2. Seed commercially treated with ORTHENE®-80SP should be labelled; TREATED SEED. DO NOT USE FOR FOOD,FEED, OR OIL.

Proposed Use for ORTHENE®-75S

No residue data was submitted with this request. The proposed use: "Apply 3 to 4 oz(2.25 to 3 oz a.i.) ORTHENE®-75S/ per acre in the planter box as a dry powder."..."To obtain even coverage, fill the planter box one-half full of seed, add proper amount of ORTHENE®-75S and mix thoroughly..."

The maximum dosage for which ORTHENE®-80 is currently registered as a seed protectant is 8 oz(6.4 oz a.i.)/100 lbs cottonseed. In order not to exceed the maximum dosage of 6.4 oz a.i./100 lbs cottonseed, the directions for the proposed use of ORTHENE-75S at "3 to 4 oz(2.25 to 3 oz a.i.) ORTHENE®-75S/per acre" should be altered to the maximum amount ORTHENE®-75S which can be used for 100 lbs of seed.†

In order not to exceed 6.4 oz a.i./100 lbs of seed, it has been estimated that cottonseed produced from one acre contains about 810 lbs of seed. Of this total, about 5% is kept for seed planting. [Cottonseed and its Products", 8th Ed., National Cottonseed Products Assn. Inc., Tennessee, 1978]. Based on this information about 41 lbs of cottonseed per acre would be used for hopper box seed treatment. The proposed use of 3 to 4 oz(2.25 to 3 lbs a.i.)/A or 41 lbs seed would correspond to 5.6 to 7.5 oz a.i./100 lbs cottonseed. (Memo: M.Loftus, 6/15/84).

The proposed label includes only the following restriction: " Do not use treated seed for food or feed purposes or process for oil."

The following restrictions, however, should be added to the proposed label, viz.,

- a. Cottonseed commercially treated with ORTHENE®-75S should be labeled, " TREATED COTTONSEED. DO NOT USE FOR FOOD, FEED, OR OIL."
- b. ORTHENE®-75S treated seeds sold or shipped as food or feed or food stuffs may be considered adulterated under state and federal laws.

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Note: Similar SLNs have been issued to permit hopper box seed treatment with ORTHENE®-75S in/on cottonseed in the States of TX, AL, AR, LA, AND GA.

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Conclusion

(1) The directions for the use of ORTHENE®-75S should be given in terms of 100 lbs cottonseed rather than in terms of per acre.

(2) Provided total dosage of acephate is limited to a maximum of 6.4 oz.a.i./100 lbs cottonseed, the residues of acephate and its metabolite, methamidophos, are not likely to exceed the established tolerance of 2.0 ppm in/on cottonseed as a result of this use.

(3) The following restrictions should be added to the ORTHENE®-75S label:

- a. Cottonseed commercially treated should be labelled, "TREATED COTTON-SEED. DO NOT USE FOR FOOD, FEED, OR OIL"
- b. ORTHENE®-75S treated seeds sold or shipped as feed or food stuffs may be considered adulterated under state or federal laws.

Recommendation

Providing total dosage is limited as stated in conclusion #2 and restrictions in conclusion #2 are added to the label, RCB would have no objection to this 24(c) request.

cc: Sec. 24(c) Acephate; RF; SF(Acephate); Reviewer; PM# 16;  
PMSB/ISB

TDI: E.Zager, Sec. Head:4/15/87: R. Schmitt: 4/15/87.

TS-769: RCB:W.Anthony:wla:mt:CM-2:x557-4351:4/15/87

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